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A BRIEF

TO

THE ONTARIO ROYAL COMMISSION ON FORESTRY

BY

ONTARIO DEPARTMENT OF PLANNING AND DEVELOPMENT

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ONTARIO DEPARTMENT OF PLANNING AND DEVELOPMENT
HONOURABLE DANA PORTER, MINISTER

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SINCE the establishment of this Department in May, 1944, considerable advance has been made in the study of and the organization for the conservation of natural resources. When this problem is approached from a broad perspective it becomes immediately apparent that its various aspects cut across the jurisdiction of a number of Departments of Government. It involves the Department of Agriculture, the Department of Lands and Forests, and the Department of Health. A sufficient comprehensive programme for the conservation of resources must take into consideration all these fields. It must be conceived from an over-all point of view. The basis for over-all planning was required. Some form of organization had to be devised through which plans could be adopted and action could be taken. The Department of Planning and Development undertook this study and has advanced in the direction of planning for the conservation of natural resources.

In all consideration of these problems the question of forest resources appeared as a major factor. To date the work of this Department in conservation studies has been confined to Southern Ontario. Much of this whole area has been stripped of its forest cover and turned into agriculture. This has led to a number of consequences. Here the problem of the forest is not merely one of conservation of an asset that might be cropped in perpetuity. It is true that any development of forest resources is a contribution towards a long term asset of real commercial value. Nevertheless, in Southern Ontario any plan for the reforestation of forest resources must primarily be concerned with other important consequences of forest development. Reforestation that is carried out according to a well devised conservation plan will accomplish a manifold purpose. It will play an important part in the control of floods, the maintenance of a steady flow of streams, the raising of the underground water level, the checking of soil erosion, the restoration of wild life and fish. All these objectives are part of any general scheme for the conservation of natural resources. A planned programme of reforestation is an essential part in any such scheme. In some areas it becomes the dominating feature of the programme.

In approaching this problem, the Department considered that there were three essential lines of action.

First, public interest must be aroused and the public must be fully informed of the nature of conservation problems, and the importance of the preservation of forests as part of any such programme. With this in mind, the Department has held three conferences: in London in October 1944; at Queen's University, Kingston, in February 1945; and

in Toronto, in November, 1946. These conferences were attended by a number of experts and specialists, as well as by many representatives of rural municipalities, agricultural organizations, The Ontario Conservation and Reforestation Association, Federation of Hunters and Fishermen, Naturalists and individuals who became interested. The proceedings of the first two conferences have already been published and widely distributed. In addition to this, the Department has published a second edition of the Report on the Ganaraska Watershed, which was made in 1944 by a joint Committee of the Dominion and Ontario Governments consisting of the Dominion Committee on Reconstruction and of the Ontario Interdepartmental Committee on Conservation and Rehabilitation. (The Report of these proceedings and a copy of the Ganaraska Report are submitted with this brief to the Commission.)

The Department has also sponsored a series of lectures throughout rural areas on conservation subjects, accompanied by moving pictures and slides, and many meetings have been held throughout different parts of Southern Ontario dealing with various aspects of conservation. It may be to some extent as the result of interest created in this way that the present demand for trees upon the Department of Lands and Forests very much exceeds the present supply.

Second, the Department has carried out conservation surveys in various areas in Southern Ontario. Without the results of a properly conducted survey an effective scheme for conservation of resources is impossible. One of the important elements in any such survey is an enquiry as to the condition of forest cover and the consideration of the areas in which forest should be restored.

In the summer of 1945 a survey was made by this Department of the Upper Thames Valley comprising some twelve hundred square miles. A careful examination was made of such problems as flood control, forest practices, soil erosion on agricultural land, wild life and recreation. The general method adopted in carrying out this and other similar surveys was based upon the method employed in the Ganaraska Survey. The Conservation staff of this Department consists of the following: a Chief Conservation Engineer, a Civil Engineer, a Forester, a Soils Specialist, a Wild Life and Recreation Planner, a Conservationist and two Consultants, one in hydraulic engineering and one in fish studies. In order to carry out these surveys a special temporary staff has been employed during the summer months amounting to about fifty men to carry out the field work under the direction of the staff of the Department. Following the field work that was done on the Thames

Valley, complete analysis of the information obtained has been made and put in the form of a four hundred page report. This report was released at London on October 25th, 1946. (Copy of the report is submitted together with a printed summary, also a summary statement made by the Honourable Dana Porter, Minister of this Department, presented at a meeting of municipalities held in London on that date, and also an address delivered by the Minister on the subject of "Conservation of Resources" which includes references to this report.)

The Department has received a number of requests for similar surveys in other river valley areas of the Province. Surveys have been completed in the watersheds of the Etobicoke, the Humber and a portion of the South Nation. Reports of these surveys are in course of preparation.

Third, the Department has sponsored Legislation for the purpose of providing for a form of organization which would have power to adopt a conservation scheme and to carry it out. The Conservation Authorities Act was passed in 1946. (A copy of this Act is submitted to the Commission with this brief.) This Act provides for the election by municipalities in a watershed area of a Conservation Authority. This Authority, subject to certain approval required by Provincial Departments, may adopt a conservation scheme. It may then carry out the necessary works involved in this scheme. It also has power to expropriate land for the purposes of a scheme. This includes the right to expropriate for the purpose of reforestation. Provision is also made for contribution from the Provincial Government towards the cost of any scheme. This remains a matter to be worked out in each particular case according to requirements.

Until this Act was passed, large scale reforestation projects had been carried out through county forest schemes and by individuals. The Department of Lands and Forests has supplied trees to individuals free of charge. The planting and maintenance of these trees has been left entirely to the individual. In the case of county forests, the Department of Lands and Forests provides the trees, plants them, undertakes the necessary fencing and maintains the forest. The county buys the land. In some counties reforestation has proceeded at a considerable pace. On the whole, however, the extent of reforestation in this way has not been sufficient to meet the needs of a general conservation programme. It is also evident that reforestation in this way is not necessarily fitted in with a conservation programme. Reforestation by individuals and through the county forests will build up a very valuable asset for future generations. It is all a step in the right direction.

Nevertheless, a further step had to be taken for conservation purposes. The power given under the Conservation Authorities Act to expropriate land for reforestation in an approved scheme provide this step.

A number of Authorities have already been set up under the Act. They are the Ganaraska, the Etobicoke and the Ausable. A meeting has also been held in the Grand Watershed, and an application has been made for an authority on the Thames Watershed and the South Nation Watershed.

The first scheme to be adopted by an Authority was submitted by the Ganarsaka Authority. There, the problem of reforestation was the most important single feature. The Authority decided as a first step to carry out reforestation in the twenty thousand acres of land which was earmarked as the Ganaraska Forest in the report. As a result of this submission the Government has agreed with the Authority to contribute to a programme of reforestation of this area. In addition to providing the trees and planting and maintaining the forest and fencing, the Government is prepared to pay half the cost of the land that may be acquired for carrying out this scheme. This will enable substantially greater advances to be made in reforestation in this conservation area than otherwise would have been possible. The powers under the Act will also enable the Authority to acquire land in the places where it is most advantageous.

The surveys and reports referred to above have already indicated certain very definite conditions which relate to forestry. Forest influences are inseparably connected with all other factors involved in the conservation of resources. For example, in every survey conducted thus far, there is definite proof that flooding has been accelerated by the clearing of land. This in turn lays bare the soil even though it be for agricultural purposes and permits large quantities of silt to go down the rivers, and in many cases also necessitating continual dredging of the harbours. Such silting is a serious problem in itself but not nearly as serious as the loss of top soil from the farms of the watershed which forms the bulk of this silt.

It is recognized, of course, that much of the good land, especially on a watershed like the Thames, had to be cleared of trees in order to use the soil for agricultural purposes, but in this work of land clearing, natural water reservoirs such as swamps, both large and small, and head water valleys were denuded of trees, and in many cases have not yielded anything in the way of agricultural land. The Thames Report for example which covers an area for the most part of excellent farm

land recommends the acquiring of 25,000 acres of this type of land. The other watersheds examined indicate the same need and the reports recommend that such land, even though it be good agricultural land, be planted for such purposes in order to supplement the fast disappearing woodlots in the agricultural sections and also to protect the headwaters of streams and to minimize rapid runoff and soil erosion into the streams and rivers.

While it is generally recognized that the forest has a direct influence on soil, water and wildlife, it is often lost sight of that it also has a decided influence on ground water, the presence of which is so important in an agricultural area. Surveys which have been conducted in Southern Ontario during the past ten years as well as the testimony of many farmers throughout Southern Ontario prove beyond a doubt that the water table of Southern Ontario is considerably lower than it was years ago. This can be attributed to the removing of the forest, particularly from the natural water storage areas such as swamps and headwater streams. During the summer of 1945, this Department initiated studies in ground water in Southern Ontario and this work is now being continued by the Ontario Department of Mines.

The surveys also indicate that in Southern Ontario the forest cover consists, to a large extent, of hardwood species. Much research and experiment is still required in the reforestation of heavy soils, especially those where little or no topsoil remains and also how to handle lands encumbered by scrub bushes such as willow, dogwood and hawthorn.

There is also need in Southern Ontario for a systematic classification of forest cover types similar to that prepared by the American Society of Foresters and in the studies carried out thus far, our foresters have commenced to make a study of this problem.

A conservation programme can only be successful if it carries with it the understanding and co-operation of residents in the area affected. It is very essential to impress on land owners by education and demonstration the actual financial advantage to them of keeping pasture separate from woodland. It is essential to determine by experiment the best methods of regenerating worn out woodlots which have been over-pastured. Some respond rapidly to the exclusion of livestock and regeneration appears immediately, this is particularly true of hard maple but not the case with white elm, silver maple and other types especially where a dense cover of grass, sedges and weeds has become established. Serious damage to both hardwoods and coniferous stands have been

done by mice and other rodents and special studies are being conducted to combat this. Where private lands are so situated that the establishment and maintenance of forest cover are essential to the protection of swamps and spring source areas for the regulation of the flow of water in streams, a system should be devised whereby the land owner is assisted in the establishment and maintenance of the same. This may be done in a number of ways. Where a Conservation Authority has been set up it is the proper medium through which many of these activities and recommendations may be adopted and carried out.

This Department emphasizes the supreme importance of giving the utmost responsibility to Conservation Authorities. These bodies are elected by the municipalities concerned. They are closest to the needs and the sentiments of the people affected. In view of the fact that they represent the whole convenient unit to which a conservation scheme can be applied, that is the area of a watershed, they are in a position to plan comprehensively and effectively. The function of this Department is to promote, to co-ordinate, to direct, to give technical guidance and advice.